

EPA BASE Study Findings - Airborne Biological Contaminants:

Mean Concentrations of Total Airborne Culturable Bacteria (Sum of Mesophilic and Thermophilic Bacteria) (CFU/m³), by Location (Indoors/Outdoors) and Season (Summer/Winter)

Bacterial group	Indoor samples		Outdoor samples	
	Summer	Winter	Summer	Winter
Total Gram+ rods	10.6	11.4	33.6	43.6
(Actinomycetes)	(2.0)	(1.2)	(6.4)	(3.4)
(<i>Bacillus</i> species)	(6.9)	(6.6)	(19.9)	(23.4)
(Other Gram+ rods)	(1.7)	(3.5)	(7.3)	(16.9)
Gram+ cocci	48.3*	28.7*	26.2	21.8
Gram- rods	3.5	2.6	14.9	11.0
Gram- cocci	1.6	1.3	1.1	3.3
Unknown	51.8	42.6	89.1	114.7
Total bacteria (All groups)	116.0*	86.7*	165.0	194.5

Source: Tsai, F.C.; Macher, J.M. 2005. Concentrations of airborne culturable bacteria in 100 large U.S. office buildings from the BASE study. Indoor Air 15(Suppl 9):71-81.